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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,324	07/06/2000	James W. Edwards	10559-227001/P8792	7184
20985	7590	02/22/2005	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			COLIN, CARL G	
			ART UNIT	PAPER NUMBER
			2136	

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/612,324

Applicant(s)

EDWARDS ET AL.

Examiner

Carl Colin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. In response to communications filed on 10/8/2004, applicant cancels claims 4-6 and amends claims 1, 7, 8-11, 15, 18, 20, 23, 25-29. The following claims 1-3, 7-30 are presented for examination.

2. The 35 USC 101 rejection to claims 1, 11, and 20 has been withdrawn with respect to the amendments filed on 10/8/2004.

2.1 Applicant's arguments, pages 7-9, filed on 10/8/2004, with respect to the rejection of claims 1 and 11 in view of Richards and Alkhatib have been fully considered, but they are not persuasive. Applicant states that Richards merely discloses reestablish connection in the case that a connection is interrupted but does not disclose that the session is maintained and reestablish by the service. Examiner respectfully disagrees. Richards discloses restoring previously working states from reference states in a transparent way (column 1, lines 42-61). Service is maintained because the server and the service provider will be on a waiting state response (column 10, lines 23-40; see also claim 23). Upon further consideration a new ground of rejection is made in view of a new reference Alkhatib et al in combination with Richards. As per claim 20, applicant argues that Bereiter does not disclose transport level communications connection. Examiner respectfully disagrees. Bereiter discloses a direct, point to point, TCP/IP connection is established, which meets the recitation of transport level communications

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connection, when the destination is not behind a firewall (see column 3, line 40 through column 4, line 23). Examiner maintains the rejection of claims 20-21 under 35 USC 102 in view of Bereiter. The rejection of the dependent claims not challenged by Applicant still applies in this office action.

Claim Rejections--35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3.1 **Claims 1-3, 7-8, 10-17, 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,754,707 to **Richards et al** in view of US Patent 6,421,732 to **Alkhatib et al**.

3.2 **As per claims 1, 3, 13, 15, Richards et al** discloses a method of establishing communications comprising: establishing a virtual connection between a source computer system and located behind a first connectivity barrier and a destination computer system and located behind a second connectivity barrier, for example (see column 11, claim 1 and column

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12, claim 14); establishing a first session between the source computer system and a service and establishing a second session between the destination computer system and the service, for example (see column 11, claim 1 and column 12, claim 14); Richards discloses restoring previously working states from reference states in a transparent way (column 1, lines 42-61).

Service is maintained the server and the service provider will be on a waiting state response for the client and the system allows the client to reestablish connection in case of interruption.

(column 10, lines 23-40; see also claim 23). **Richards et al** does not explicitly disclose assigning virtual host name to the computer system. It is known in the art that the packet can contain IP addresses and port numbers or/and domain names. **Alkhatib et al** in an analogous art teaches an IPNet gateway service that can forward and relay connections wherein the destination server is assigned a domain name (column 2, lines 58-60) and the client may have also a domain name (column 6, lines 38-40) so that address translation can be performed. **Alkhatib et al** also discloses the use of gateway as firewall (see column 1, lines 32-33). **Alkhatib et al** further discloses using a waiting state by allowing the first session to retry to re-establish connection while the service maintains a session with the server, for example (see column 6, lines 11-23; column 5, lines 31-67; see also figure 3). **Alkhatib et al** adds that a time period for connection allows a lockout source to have another chance to make another connection without being explicitly denied, for example (see column 8, lines 22-47 and column 7, lines 44-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Richards et al** to include a service that can associate with host name and maintaining connection if the first session is temporarily lost and continue the session from the point the connection was lost. This modification would have been obvious because one

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skilled in the art would have been motivated by the suggestions provided by **Alkhatib et al** so as to allow the source to have another chance to make another connection without being explicitly denied (column 7, lines 44-58).

As per claim 11, Richards et al discloses a method of establishing communications between source and destination computer systems comprising: establishing a session between the source computer system located behind a first connectivity barrier and a service, for example (see column 11, claim 1 and column 12, claim 14); and establishing a transport level communications connection between the service and the destination computer system, the destination computer system located behind a second connectivity barrier, for example (see column 11, claim 1 and column 12, claim 14). **Alkhatib et al** discloses maintaining the session between the service and the destination computer system if the session between the source computer system and the service is interrupted as discussed in claim 1. Therefore claim 11 is rejected on the same rationale as the rejection of claim 1.

As per claims 2 and 12, Richards et al discloses the limitation of wherein at least one of the connectivity barriers comprises a firewall, for example (see column 11, claim 1 and column 12, claim 14).

As per claim 14, Richards et al discloses the limitation of including assigning one or more servers associated with the service to handle the sessions, for example (see column 7, lines 27-48).

As per claims 7-8 and 16-17, **Alkhatib et al** discloses wherein the virtual host names comprise part of a hierarchical naming system, (column 3, lines 53-60) and discloses using a DNS that allows users to search for host names (column 3, line 45 through column 4, line 7) that meets the recitation of providing a directory search application to allow a user to select the virtual host names. Therefore claims 7-8 and 16-17 are rejected on the same rationale as the rejection of claims 1 and 11.

As per claims 10 and 19, **Richards et al** discloses the limitation of including dynamically assigning at least one server associated with the service to handle the sessions, for example (see column 7, lines 27-48).

4. **Claims 9 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,754,707 to **Richards et al** in view of US Patent 6,421,732 to **Alkhatib et al** as applied to claims 1 and 11 above and further in view of US Patent 6,571,290 to **Selgas et al.**

4.1 As per claims 9 and 18, both references substantially teach the claimed method of claims 6 and 15 of establishing communications between networks. Neither of the references explicitly teaches roaming between networks. It is well known in the art that roaming between networks is notoriously well known for a wireless to search between networks to reestablish sessions. **Selgas et al.** in an analogous art teaches a method of service that allows a user to roam between networks using attributes and provides at least ten advantages including offering access

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via multiplicity of network access providers, automatic configuration, and minimizing improper use of clients, etc., for example (see column 4, line 50 through column 5, line 45; see also abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method as combined above wherein the source computer system can roam between networks to offer access via multiplicity of network access providers, as taught by **Selgas et al.** This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Selgas et al.** in order to offer access via multiplicity of network access providers, for example (see column 4, line 50 through column 5, line 45).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5.1 **Claims 20-21** are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,185,606 to **Bereiter**.

5.2 **As per claim 20, Bereiter** discloses a system comprising: a service arranged to respond to a request from a first computer system to establish communications with a second computer system, wherein, if the second computer system is located behind a connectivity barrier, a session initiated by the second computer system is established with the service (column 3, line 62 through column 4, line 8), and if the second computer system is not located behind a connectivity barrier, a transport level communications connection is established with the second computer system, for example (see column 3, lines 40-61).

As per claim 21, Bereiter discloses the limitation of wherein at least one of the connectivity barriers comprises a firewall, for example (see column 3, line 40 through column 4, line 23).

6. **Claims 22-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,185,606 to **Bereiter** in view of US Patent 6,119,171 to **Alkhatib**.

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6.1 As per claim 22, **Bereiter** substantially teaches establishing communications wherein at least one of the connectivity barriers comprising a firewall. **Bereiter** does not explicitly disclose one of the connectivity barriers comprises a consumer gateway. However, **Alkhatib** in an analogous art teaches using a consumer gateway to perform Network Address Translation thus allowing private network to communicate outside of the private network (e.g. via the Internet), for example (see column 2, lines 13-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Bereiter** to provide at least one of the connectivity barriers as a consumer gateway to perform Network Address Translation thus allowing private network to communicate outside of the private network via the Internet as taught by **Alkhatib**. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Alkhatib** so as to perform Network Address Translation thus allowing private network to communicate outside of the private network (e.g. via the Internet).

As per claims 23-25, **Bereiter** substantially teaches establishing communications wherein the service is arranged to assign a server to handle the session between the first computer system and the service dynamically, for example (see column 5, lines 15-25). **Bereiter** also discloses using point-to-point addresses, and further discloses an alternative when a point-to-point connection cannot be made, but does not explicitly disclose assigning a server to make a connection based on virtual host name associated with the first computer system. However, **Alkhatib** in an analogous art teaches a process of establishing point-to-point connection where the service is arranged to assign a server to handle the session between the first computer system

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and a service based on a virtual host name associated with the first computer system. **Alkhatib** adds that such connection provides efficient and reliable service to users, for example (see column 8, lines 22-47 and column 7, lines 44-58). **Alkhatib** also discloses wherein the virtual host name comprises part of a hierarchical naming system, for example (see column 12, lines 1-21; column 8, lines 22-47 and column 5, lines 25-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Bereiter** to perform network address translation to provide an efficient and reliable service to users by assigning a server to handle the session between the first computer system and a service based on a virtual host name associated with the first computer system as taught by **Alkhatib et al**. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Alkhatib et al** so as to perform network address translation to provide an efficient and reliable connection service.

7. **Claims 26-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,754,707 to **Richards et al** in view of US Patent 6,421,732 to **Alkhatib et al** and in view of US Patent 6,185,606 to **Bereiter**.

7.1 **As per claims 26-28, Richards et al** substantially teaches an article comprising a computer-readable medium including computer-executable instructions for causing a computer system, in response to a request from a first computer system located behind a first connectivity barrier to establish connectivity to a second computer system, for example (see column 11, claim 1 and column 12, claim 14) and further teaches establish a session initiated by the second

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computer system if the second computer system is located behind a second connectivity barrier, for example (see column 5, lines 1-10). **Richards et al** further discloses establish a direct session with the second computer system if the second computer system is not located behind a connectivity barrier, for example (see column 5, lines 1-10 and column 4, lines 63-67).

Richards et al discloses assign a server to handle a session between the first computer system and a service, for example (see column 7, lines 27-48). **Richards et al** does not explicitly disclose making a determination in response to if the second computer system is located or not behind a connectivity barrier. **Bereiter** in an analogous art teaches a system to establish a session initiated by the second computer system if the second computer system is located behind a second connectivity barrier and to instruct the first computer system to establish a direct session or transport level communications connection with the second computer system if the second computer system is not located behind a connectivity barrier to adapt to the available communication path, for example (see column 3, line 40 through column 4, line 23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Richards et al** to establish a session initiated by the second computer system if the second computer system is located behind a second connectivity barrier and to instruct the first computer system to establish a direct session with the second computer system if the second computer system is not located behind a connectivity barrier in order to adapt to the available communication path as taught by **Bereiter**. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Bereiter** so as to provide the benefit to adapt to the available communication path. **Alkhatib et al** discloses maintaining the session between the service and the destination computer system if

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the session between the source computer system and the service is interrupted as discussed in claim 1. Therefore claim 11 is also rejected on the same rationale as the rejection of claim 1.

Claims 29-30 contain the same limitations as claims 23-24 and claims 15-16 above.

Therefore, **claims 29-30** are rejected on the same rationale as the rejection of claims 23-24 and claims 15-16.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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8.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

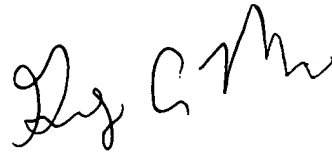
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Carl Colin

Patent Examiner

February 16, 2005



GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100